




MEMORANDUM

Missouri Department of Transportation Design General Headquarters

TO: All General Headquarters and District Offices

FROM: Diane Heckemeyer
State Design Engineer 

DATE: November 19, 2004

SUBJECT: Design
Development Manual Letter No. 9, 2004
Project Development Manual Revisions

Questions concerning the Project Development Manual revisions should be directed to General Headquarters, Design Standards Section, Dan Tschirgi (573) 526-2924 or Joe Jones (573) 751-3813.

NOTE	EXPLANATION
1	The following revisions are effective November 19, 2004.
2	In all sections that are being revised, references to functional units in General Headquarters (GHQ) are being changed to "Division" or "Central Office".

ITEM	DESCRIPTION OF REVISION
Volume I Table of Contents	Revision dates changed for appropriate sections.
Section 1-02	Subsection 1-02.12(10)(b) on design considerations for STIP estimates has been revised to include guidance for alternate pavement estimates taken out of Section 6-03. For new construction, base costs on the construction of concrete pavement. For projects involving a concrete unbonded overlay, base costs on the construction of an 8-inch concrete unbonded overlay as described.
Chapter II Table of Contents	Revisions made to the table of contents corresponding with section and figure revisions.
Section 2-06	Subsection 2-06.3(13) has been revised from "Pavement Type Selection" to "Pavement Thickness Determination". The pavement thickness determination request should be submitted during preliminary design. All projects that contain paving should be considered for alternate pavement bids, and the alternate pavement recommendation is documented in the Project Scoping Memorandum. The Project Scoping Memorandum will be revised to add a fill in section entitled "Alternate Pavement Recommendation".

ITEM	DESCRIPTION OF REVISION
Volume II Table of Contents	Revision dates changed for appropriate sections.
Chapter VI Table of Contents	Revisions made to the table of contents corresponding with section and figure revisions.
Section 6-03	<p>Section 6-03 has been substantially revised. Information not pertinent to the pavement design process has been removed and design information for pavement thickness determinations, alternate pavements, flexible and rigid pavements, and base considerations have been revised. Minor revisions have been made to other Subsections.</p> <p>All projects that contain paving should be considered for alternate pavement bids. On alternate bid projects, the subgrade profile and cross sections are designed for only one of the alternates as described in Subsection 6-03.4.</p> <p>If there is a need to specify one pavement type over another on any project, the core team is responsible for making the decision. The Project Manager is responsible for documenting the reasons for the decision in the Project Scoping Memorandum.</p>
Section 6-04	In Subsection 6-04.2(1)(e), a reference was added to the special sheet Type A2 Shoulders for Light Duty Pavements” for calculation of base quantities. A description of Type A2 concrete shoulder options was also added.
Section 6-05	<p>In Subsection 6-05.8 and 6-05.9, references were added to Subsection 6-05.19, Heavy Duty Pavement Rehabilitation Projects. In Subsection 6-05.18, Unbonded Concrete Overlays, guidance was added to have contractor staking included in Section 1 so that it applies to both the asphalt and concrete overlay alternates. Also, clarification was added in regard to adjustment of the profile. The profile adjustment is done to establish quantities, not to re-establish the vertical alignment grade control points.</p> <p>The text of Subsection 6-05.19, Heavy Duty Pavement Rehabilitation Projects was moved here from Section 6-03. Subsection 6-05.20, Asphalt Over Rubblized Pavement was added with a description of rubblization and considerations necessary during design.</p>